



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/627,237

07/25/2003

Markus Lutz

207.008-US

4184

7590

02/08/2005

Neil A. Steinberg
Steinberg & Whitt, LLP
Suite 1150
2665 Marine Way
Mountain View, CA 94043

EXAMINER

PRENTY, MARK V

ART UNIT

PAPER NUMBER

2822

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,237

Applicant(s)

LUTZ ET AL.

Examiner

MARK V. PRENTY

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-37 and 40 is/are rejected.
- 7) ☒ Claim(s) 38,39 and 41-64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 5 of them.
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2822

This Office Action is in response to the response filed on December 20, 2004.

Independent claim 50 is objected to because "the vent" (line 15) lacks antecedent basis. Claims 51-64 depend on independent claim 50 and are thus similarly objected to. Correction is required.

Claims 32-37 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Diem et al. (United States Patent 5,576,250 – hereafter Diem).

With respect to independent claim 32, Diem discloses an electromechanical device (see the entire patent, including the Figs. 9-10 disclosure, for example) comprising: a substrate 8[;] an insulation layer 28 disposed on the substrate, a first semiconductor layer 32 disposed on the insulation layer; an anchor 60 that is disposed in an opening in the insulation layer and the first semiconductor layer and contacts the substrate, wherein the anchor includes a material (silicon nitride or silicon oxynitride – see column 13, lines 25-26) that is different than the insulation layer (silicon dioxide – see column 9, line 66); a second semiconductor layer 36 (see the Fig. 16B disclosure), disposed on the anchor; and a fixed electrode 18, formed in part from the second semiconductor layer, wherein the fixed electrode is affixed to the substrate via the anchor.

Claim 32 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

With respect to dependent claim 33, Diem's anchor 60 includes silicon nitride (see column 13, lines 25-26).

Claim 33 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

Art Unit: 2822

With respect to dependent claim 34, Diem's insulation layer 28 includes silicon oxide (see column 9, line 66).

Claim 34 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

With respect to dependent claim 35, Diem's device further includes a moveable electrode 2a, juxtaposed the first electrode 18, wherein the moveable electrode is formed in part from the second semiconductor layer 36.

Claim 35 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

With respect to dependent claim 36, Diem's insulation layer 28 includes silicon oxide (see column 9, line 66) and the anchor material 60 includes silicon nitride (see column 13, lines 25-26).

Claim 36 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

With respect to dependent claim 37, Diem's insulation layer 28 includes silicon oxide (see column 9, line 66) and the anchor material 60 includes silicon (see column 13, lines 25-26).

Claim 37 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

With respect to dependent claim 40, a substantial portion of Diem's fixed electrode 18 overlying the anchor material 60 is polycrystalline silicon (see column 13, lines 45-49).


Claim 40 is thus rejected under 35 U.S.C. 102(b) as being anticipated by Diem.

Claims 38, 39 and 41-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2822

The prior art of record does not disclose or suggest the allowable electromechanical devices taken as a whole, including the anchor.

Registered practitioners can telephone the examiner at (571) 272-1843. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (571) 272-2800.


Mark V. Prenty
Primary Examiner